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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/727,835	12/04/2003	Craig Andrews	LYNN/0162	8895
24945	7590	07/10/2007	EXAMINER	
STREETS & STEELE 13831 NORTHWEST FREEWAY SUITE 355 HOUSTON, TX 77040			LEE, CYNTHIA K	
			ART UNIT	PAPER NUMBER
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/727,835

Applicant(s)

ANDREWS ET AL.

Examiner

Cynthia Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 May 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 13-16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Arguments

This Office Action is responsive to the amendment filed on 5/10/2007. Claims 1-16 are pending. Claims 13-16 are withdrawn from further consideration as being drawn to a non-elected invention. Claims 1-6 and 11 have been amended.

The Objection to the Drawings has been withdrawn.

The 35 USC 112, 2nd paragraph rejections have been withdrawn.

Applicant's arguments have been fully considered and are persuasive. However, upon further consideration, the instant claims are rejected under new grounds of rejections. Thus, claims 1-12 are finally rejected for reasons necessitated by applicant's amendment.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claim 5 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. The limitation "elastically deformed" in claim 5 is not found in the disclosure as originally filed.

Applicant is required to cancel the new matter in reply to this Office Action.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 3, 4, 6, 7, 9-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faita (US 5482792) in view of Mease (US 6358641) and Clark (US 6086643).

Faita discloses a plurality of self-aligning plates, each plate having at one manifold passage and manifold passages of the plates are aligned (claim 1). The plates further comprise an intermediate plate disclosed between two of the self-aligning plates and has at least one passageway through the intermediate plate and aligns with the manifolds of the self-aligning plates (claim 11) (see 8 in fig. 6).

Faita discloses holes and a tie rod passing through the holes (4 in fig. 2, 5:55-60), but does not disclose a plurality of non-continuous projections extending from the plane of the plate. However, Mease teaches pins extending from plates to align the plates (see abstract and 14 in fig. 3). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Faita's holes for Mease's projections for the benefit of keeping each plate fixed to the adjacent plates.

Faita modified by Mease teaches non-continuous projections, but does not disclose a recess. Mease teaches holes (see abstract) and not recesses. However, Clark teaches of a projection and a recess sealing each fuel cell plate with its respective adjacent plates (see fig. 2). It would have been obvious to one of ordinary skill in the art at the time the invention was made to substitute Mease's holes for Clark's recess for the benefit of securing the ends of the projections.

Regarding claims 6 and 7, absent specifics of the location and criticality to the locations, the Examiner notes that it would be merely a design choice to place the projections at various points on the plate to meet the sealing needs of the plate.

Claims 2 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Faita (US 5482792) in view of Mease (US 6358641) and Clark (US 6086643) as applied to claim 1, further in view of Thomas (US 2005/0019645).

Faita modified by Mease and Clark does not teach where the non-continuous recesses frictionally engage the ends of the projections received therein. However, Thomas teaches that the distal surface of the rib contacts the floor of the groove of the fuel cell plate seal [0048]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to allow the ends of the projections frictionally engage the recess for the benefit of tightly forming a seal.

Faita modified by Mease and Clark does not teach an adhesive disposed between two of the self-aligning plates. However, Thomas teaches of an adhesive between the rib and the groove of a seal [0048]. It would have been obvious to one of

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ordinary skill in the art at the time the invention was made to add an adhesive between the projection and the recess of the seal of Faita modified by Mease and Clark for the benefit of securing the projection from the recess.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Faita (US 5482792) in view of Mease (US 6358641) and Clark (US 6086643) as applied to claim 1, further in view of Suenaga (US 2002/0051902).

Faita modified by Mease and Clark does not teach whose projections are made from a polymer and are elastically deformed when disposed in the corresponding recesses. Mease discloses that the projections are made of plastic (3:50-55), but does not disclose that it elastically deforms. However, Suenaga teaches a fuel cell with a seal assembly 10A. See fig. 1. The seal is form of an elastomer type material [0019]. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the projections with a polymer that elastically deforms for the benefit of allowing for relative movement between the plates without allowing for failure of the seals.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP

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§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cynthia Lee whose telephone number is 571-272-8699. The examiner can normally be reached on Monday-Friday 8:30am-5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Susy Tsang-Foster can be reached on 571-272-1293. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

ckl

Cynthia Lee

Patent Examiner

Amy Isang Lee
Supervisory Patent Examiner